MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2018/2019

BEC1614 – MICROECONOMICS
(All sections / Groups)

24th OCTOBER 2018
9 a.m. - 12 p.m.
(3 Hours)

INSTRUCTIONS TO STUDENTS

1. This question paper consists of **FOUR (4)** printed pages with **Four (4)** structured questions.

2. Marks are shown at the end of each question.

3. Write all your answers in the answer booklet provided.

4. Answer **ALL** questions.

Question One (25 marks)

(a) **Scenario 1:** Frank spends all of his income of RM240 per month on shirts and hats. The price of a shirt is RM40 and the price of a hat is RM30.

    i.   Based on **Scenario 1**, if Frank uses all of his income to buy hats during a certain month, then how many hats does he buy?   **(3 marks)**

    ii.   Based on **Scenario 1**, if Frank buys 3 shirts during a certain month, then how many hats does he buy during that month?   **(3 marks)**

    iii.   Refer to **Scenario 1**, what is the slope of Frank's budget constraint if it is drawn with the quantity of shirts on the horizontal axis and the quantity of hats on the vertical axis?   **(5 marks)**

(b) Describe the law of a diminishing marginal product of labour. Why would a profit-maximizing firm always choose to operate where the marginal product of labour is decreasing?   **(8 marks)**

(c) **Table 1** shows the total production for labor (TP_L) in producing personal computers. Assume other input quantities employed by the firm remain constant. Calculate the marginal product of labor (MP_L) and total revenue (TR).   **(6 marks)**

Table 1

Units of Labors	TP_L	MP_L	Price (RM)	TR (RM)
0	0		1000	
1	10		1000	
2	18		900	
3	24		800	
4	28		700	
5	30		600	

Continued...

Question Two (25 marks)

(a) Refer to **Figure 1**: use the Production Possibilities Frontier diagram below to answer the following questions.

Figure 1: Production Possibilities Frontier
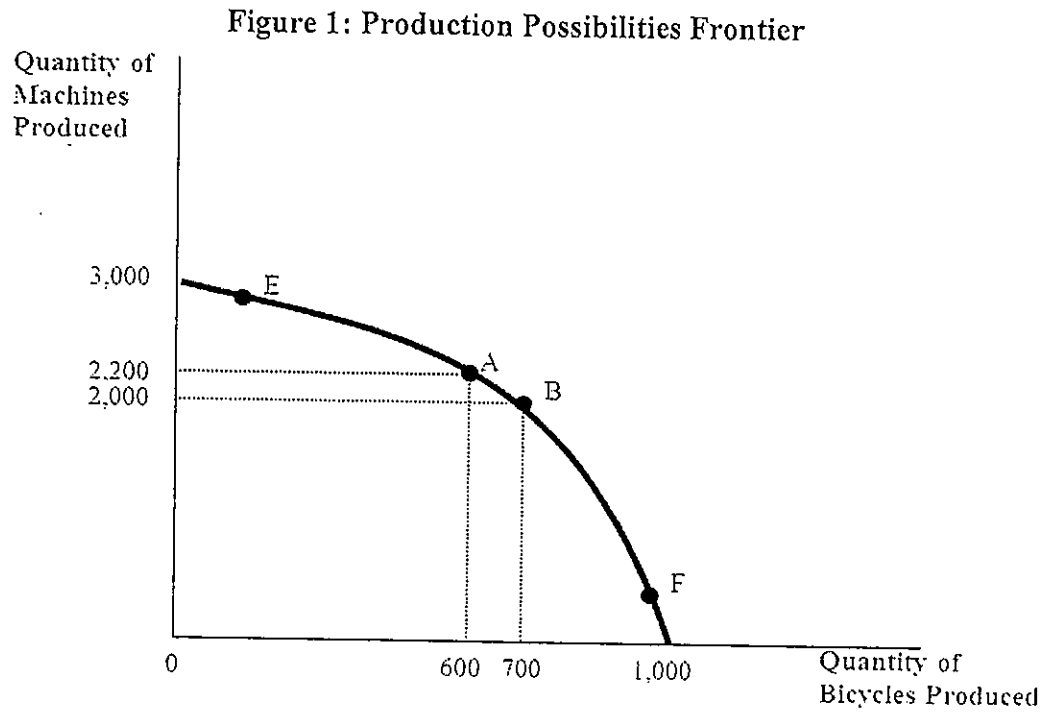
Interpret the bowed outward shape of the production possibilities frontier in **Figure 1** in terms of increasing opportunity costs and trade-offs. Use points E to F in the figure in your description. (10 marks)

(b) Construct **TWO (2)** situations where an accounting firm could experience diseconomies of scale due to hiring more auditors. (7 marks)

(c) Explain **FOUR (4)** properties of indifference curves. (8 marks)

Continued...

Question Three (25 marks)

(a) Suppose an asthma inhaler named Seretide is a patented drug, manufactured by HJ pharmaceutical company in Malaysia. **Table 2** presents the demand schedule for Seretide.

Table 2

Price of Seretide (RM)	Number of Seretide (units)
240	10,000
220	20,000
200	30,000
180	40,000
160	50,000
140	60,000
120	70,000
100	80,000
80	90,000

The company can produce the Seretide with no fixed cost and the marginal cost of each Seretide is a constant RM80.

(i) Compute marginal revenue for all quantity level. (4 marks)

(ii) Determine the price charged and quantity of Seretide that would maximize the company's profit. (3 marks)

(iii) Based on part (ii), calculate the total profit. (2 marks)

(iv) Suppose the patent for Seretide is expired, new pharmaceutical firms enter the market, and making it more competitive. Determine the price charged and quantity of Seretide that would maximize the company's profit. (3 marks)

(v) Based on part (iv), calculate the total profit. (2 marks)

(b) Explain how the general shapes of the Average Variable Cost (AVC) and Average Total Cost (ATC) curves are related to each other. (4 marks)

(c) The cost of flying a passenger plane from point A to point B is RM 50,000. The airline flies this route three times per day at 7 AM, 10 AM, and 4 PM. The first flight is filled to full capacity with 240 people. The second and third flights are only half full.

    (i)   Find the average cost per passenger for each flight.   (4 marks)

    (ii)   Will you suggest the flight to sell the rest of the tickets for the second and third flight at a price less than average cost of ticket? If so, explain what will happen to the company's profit.   (3 marks)

Question Four (25 marks)

(a) Can a firm in a perfectly competitive market make loss in the short run? Show the situations when the firm will continue to produce and when the firm will shut down in the short run using diagrams.   (10 marks)

(b) Why is a monopolistically competitive industry said to be economically inefficient? Show your answer graphically.   (6 marks)

(c) Suppose that marginal cost of production is greater than the average variable cost. Explain whether the average variable cost is increasing or decreasing in such situation.   (3 marks)

(d) What does it mean when economists say "monopolists do not have supply curves"? Show your answer graphically.   (6 marks)

End of Page